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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/710,490 | 11/10/2000 | Kyou-Yoon Sheem | 41037/DBP/Y35 | 5330 |

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CHRISTIE, PARKER & HALE, LLP
350 WEST COLORADO BOULEVARD
SUITE 500
PASADENA, CA 91105

EXAMINER

WEINER, LAURA S

| ART UNIT | PAPER NUMBER |
|----------|--------------|
|----------|--------------|

1745

DATE MAILED: 09/26/2002

12

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/710,490

Applicant(s)

SHEEM ET AL.

Examiner

Laura S Weiner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2, 4, 6, 8, 10, 12 and 13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) 4 and 10 is/are allowed.
- 6) ☒ Claim(s) 2, 6, 8 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☒ Interview Summary (PTO-413) Paper No(s). 10.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Response to Amendment

1. Examiner acknowledges the cancellation of claims 3, 5, 9 and 11 and the addition of claim 13 cited in Amendment B filed 8-14-02. Examiner acknowledges the cancellation of claims 1 and 7 cited in Amendment A dated 4-22-02.
2. This application contains claims directed to the following patentably distinct species of the claimed invention: (I) A negative electrode comprising nitride, sulfide, chloride and fluoride compounds (claims 2, 4, 6, 8, 10 and 12) and (II) a negative electrode comprising calcium oxalate monohydrate, B_2O_3 and BF_3 .

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claims are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations

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of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. During a telephone conversation with Kathleen Olster on September 19, 2002, a provisional election was made without traverse to prosecute the invention of Species (I), claims 2, 4, 6, 8, 10, 12. Affirmation of this election must be made by applicant in replying to this Office action. Claim 13 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected specie.

Claims 2, 4, 6, 8, 10 and 12 have been examined on their merits.

Response to Arguments

4. Applicant's arguments with respect to claims 2-6 and 8-12 have been considered but are moot in view of the new ground(s) of rejection.

The rejection of claims 2-6, 8-12 under 35 U.S.C. 102(b) as being anticipated by Murata et al. (6,150,053) has been withdrawn because Murata et al. teaches the specie H₃BO₃.

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Claim Rejections - 35 USC § 112

5. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 is rejected because the metals Ca and Mg should be alkaline earth metals and not alkaline metals.

Claim Rejections - 35 USC § 102

6. Claim 6 is rejected under 35 U.S.C. 102(b) as being anticipated by Nordblom et al. (3,639,176).

Nordblom et al. teaches a zinc negative electrode comprising HgS as an additive and teaches that a mixture of HgS and PbS is also an effective additive. Nordblom et al. teaches in column 3, lines 1-11, that the additive ranged from 2-7%.

7. Claims 6, is rejected under 35 U.S.C. 102(b) as being anticipated by Kalaighan et al. "Electrochemical behaviour of addition agents impregnated in cadmium hydroxide electrodes for alkaline batteries".

Kalaighan et al. teaches a negative cadmium electrode comprising 0.01-0.03 M Na₂S additive.

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8. Claims 2, 6, 8 and 12 are rejected under 35 U.S.C. 102(a) as being anticipated by Watanabe et al. (JP 2000-243445, abstract).

Watanabe et al. teaches a non-aqueous electrolytic battery consisting of a positive electrode, a negative electrode and a non aqueous solvent. The positive electrode material consists of a lithium contained manganese oxide and the negative electrode active material consists of one of more of molybdenum oxide, a lithium titanate, an iron sulfide and a niobium pentoxide.

Allowable Subject Matter

9. Claims 4 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4 and 10 are allowable over the prior art of record because no reference teaches that the compound includes at least one boron compound in addition to be a nitride, sulfide, chloride or fluoride compound.

Conclusion

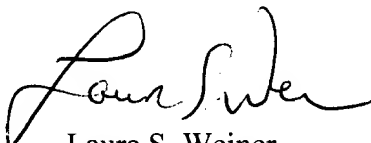
10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura Weiner whose telephone number is (703) 308-4396. The examiner works a flexible schedule.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (703) 308-2383. The fax phone number for non-after finals is 703-872-9310 and the fax phone number for after-finals is 703-872-9311.



Laura S. Weiner
Primary Examiner
Art Unit 1745
September 24, 2002